



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

WA 0906
12-13-93
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Reply To
Attn Of: HW-104

December 13, 1993

MEMORANDUM

SUBJECT: Ridgefield Brick and Tile Facility
EPA ID No. WAD009036906

FROM: Marcia L. Bailey, Environmental Scientist
RCRA Compliance Section *Marcia Bailey*

TO: Dean Ingemansen, Assistant Regional Counsel
Office of Regional Counsel

This is in response to your query of this morning regarding the existing financial assurance which is in place for the Ridgefield Brick and Tile facility (RBT), owned and operated by Pacific Wood Treating Corporation in Ridgefield, Washington. RBT is subject to an outstanding RCRA section 3008(a) order which requires it to comply with 40 CFR Part 265 Subparts F, G and H. EPA has given a wide berth to the company in terms of its timeliness in complying with the terms of the order inasmuch as the company's main site in Ridgefield presents a more egregious threat to human health and the environment. Nevertheless, the landfill at the RBT site remains not fully characterized in terms of potential or actual ground water contamination, and there are significant expenses which must be realized in terms of completing an adequate closure at the site. A full RCRA Part B post-closure permit requiring 30 years of post-closure monitoring and corrective action at the landfill remains a possibility.

Attached is the most recent submittal from EPA's consultant Robert Farrell regarding the inadequacy of the ground water monitoring system at the RBT site. This submittal demonstrates why the government should not relinquish any funds which have been established pursuant to 40 CFR Part 265 Subpart H for financial assurance to fulfill the environmental and regulatory requirements at the RBT facility. Please contact me at (206) 553-0684 if you have further questions regarding the RBT site or the importance to the federal government of maintaining the existing financial assurance instruments for the facility, until all statutory and regulatory closure, post-closure and corrective action needs have been satisfied.



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bc: Betty Wiese
Jack Boller
Sylvia Burges

DRAFT

SEPTEMBER 8, 1993

TO:MS. MARCIA BAILEY

FROM:ROBERT FARRELL

SUBJECT:RBT-LETTER FROM MR. BRYANT ADAMS OF JULY 10, 1993

Mr. Adams's letter of July 10 ,1993 is unusual in several aspects. It is not clear that the impact of several of the items discussed in the letter on the proposed ground water monitoring program and the state of the site investigation is understood. If there is indeed an "underground stream or streams" under this waste site as suggested, the waste should be immediately removed because the site would be on karst terrain or worst. The site would be unsuitable for any kind of waste disposal. However, the data that has been collected to date indicates that there are no such underground streams present. What is present is a zone of higher permeable sand sandwiched between layers of lower permeable sediments. The upper layer is a silt and the lower layer is the cemented Troutdale Formation. A perched water table develops in the sandy layer between these two lower permeable layers when the infiltration through the top layer is greater than the infiltration into the top of the Troutdale Formation.

The observed rise of 20 to 30 feet in the wells in the silt layer is unusual but not unheard of. Two obvious reasons can be provided for the observed relative rise in the water levels in these wells. The most likely is a malfunctioning surface seal that allows the infiltration of precipitation down the annulus between the boring well and the well casing. The second explanation is based on the high moisture content expected in most silt sediments. Most silts will maintain 90% or more of saturation in moist areas. Little additional moisture is necessary to change the percent of saturation from below saturation to 100% saturation. This slight rise in the amount of water in the silt results ns a very rapid rise in the water table with an equally rapid lowering of the water table after the precipitation has stopped. This phenomenon is common in loess deposits in the midwest. Minor amounts of water are involved. The biggest delay in measuring the change in the ground water level is caused by the delay in filling or draining the well casing with water from the silt. Pressure transducers, buried in the sediment, are better suited to measure rapid changes in the water level in the silts.

The second part of Mr. Adams's letter attempts to demonstrate that the low levels of contaminants detected in the water samples are artifacts of the laboratory analysis rather than actually being present in the water samples. The presence of these lower levels of contaminants in the water samples is related to the method of monitoring the site that is discussed in the next paragraph of Mr. Adams's letter. Mr. Newton attempted, over two years, to

demonstrate that the underdrain system is monitoring ground water that has passed under the site. Mr. Newton could not establish this connection. The chemical data provided an alternative demonstration that there is a seasonal interconnection. If it is agreed that the chemical data is in fact incorrect, then it will be necessary to conclude that the interconnection of the underdrain system with the seasonal ground water flow has not been established and additional investigation is necessary.

A careful reading of pages 9 to 12 of the final CME report will indicate that PRC's analysis of the chemical data does, in fact, consider the QA/QC analytical results in writing the CME report. Based on this reading, it is still concluded that the chemical data does support the finding of low levels of contaminants in water samples associated with this site. It is believed that the monitoring program recommended in the CME (pg. 14 and 17) is suited for this site and will provide the earliest warning of a release from the waste. The proposal on pg. 3 of Mr. Adams's letter does not constitute the rigorous monitoring program necessary at this site. There should be water level alarm systems placed on the underdrain and toe drain collection sumps to facilitate the collection of the earliest possible water samples when there is sufficient water available. Water level recorders should be placed on the monitoring wells and sumps. A demonstration should be made that the weather station in Ridgefield would be approximately equivalent to a precipitation recording station at the site itself. An explanation for achieving a rapid response to a precipitation event in the time frame that will be required before the water has chemically equilibrated or infiltrate into the underlying Troutdale Formation is needed.

The parameters to be monitored should be those contained on table 1 of the CME.